Dkt. 59472-A-PCT-US/JPW/ALB

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : David Stern, et al.

Serial No. : 10/049,893

Filed : February 13, 2002

For : METHODS OF INHIBITING BINDING OF β-SHEET FIBRIL TO RAGE AND CONSEQUENCES THEREOF

1185 Avenue of the Americas
New York, New York 10036
September 20, 2002

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

In accordance with their duty of disclosure under 37 C.F.R. §1.56, applicants direct the Examiner's attention to the following references which are listed on the PTO-1449 form attached hereto as **Exhibit A**. Copies of these references are attached hereto as **Exhibits 1-27** respectively.

1. U.S. Patent No. 5,864,018, issued January 26, 1999 (Morser et al.) **(Exhibit 1)**;

2. PCT International Application No. PCT/EP97/01834 (WO 97/39125) published October 23, 1997 (Morser et al.) **(Exhibit 2)**;

3. Akama, T. Keith, et al., "Amyloid β-peptide stimulates nitric oxide production in astrocytes through an NFκB-dependent mechanism," Proc. Natl. Acad. Sci., 1998, 95: 5795-5800 **(Exhibit 3)**;

4. Behl, C., et al., "Hydrogen Peroxide Mediates Amyloid β Protein Toxicity", Cell, 1994, 77: 817-827 **(Exhibit 4)**;

5. Combs, K. Colin, et al. "Identification of Microglial Signal Transduction Pathways Mediating a Neurotoxic Response to Amyloidogenic Fragments of β-Amyloid and Prion Proteins", Journal of Neuroscience, 1999, 19(3): 928-939 **(Exhibit 5)**;

6. Forloni, Gianluigi, et al. "Amyloid in Alzheimer's Disease and Prior-Related Encephalopathies: Studies With Synthetic Peptides", Progress in Neurobiology, 1996, 49: 287-315 **(Exhibit 6)**;

7. Ghiso, Jorge, et al. "Unifying Features of Systemic and Cerebral Amyloidosis", Molecular Neurobiology, 1994, 8(1): 49-64 **(Exhibit 7)**;

8. Inagaki, Fuyuhiko, et al. "Conformation of Erabutoxins a and b in Aqueous Solution as Studied by Nuclear Magnetic Resonance and Circular Dichroism", Eur. J. Biochem., 1978, 89: 433-443 **(Exhibit 8)**;

9. Kilsilevsky, Robert, et al. "Arresting amyloidosis in vivo using small-molecule anionic sulphonates or sulphates: implications for Alzheimer's disease", Nature Medicine, 1995, 1: 143-148 **(Exhibit 9)**;

10. Kimball, M.R., et al. "Molecular Conformation of Erabutoxin b; Atomic Coordinates At 2.5 Å Resolution", Biochemical and Biophysical Research Communication, 1979, 88: 950-959 **(Exhibit 10)**;

11. Kindy, S. Mark and Rader, J. Daniel "Reduction in Amyloid A Amyloid Formation in Apolipoprotein-E-Deficient Mice", American J. Pathology, 1998, 152: 1387-1395 **(Exhibit 11)**;

12. Kirschner, A. Daniel, et al. "X-ray diffraction from intraneuronal pairs helical filaments and extraneuronal amyloid fibers in Alzheimer disease indicates cross-β conformation", Proc. National Acad. Sci., 1986, 83: 503-507 **(Exhibit 12)**;

13. Lander, H. L., et al. "Activation of the Receptor for Advanced Glycation Endproducts triggers a MAP Kinase pathway regulated by oxidant stress", J. Biol. Chem., 1997, 272: 17810-17814 **(Exhibit 13)**;

14. Levine, Harry "Thioflavine T interaction with synthetic Alzheimer's disease β-amyloid peptides: Detection of amyloid aggregation in solution", Protein Sci., 1993, 2(3): 404-410 **(Exhibit 14)**;

15. Mattson, M.P. and Goodman, Y. "Different amyloidogenic peptides share a similar mechanism of neurotoxicity involving reactive oxygen species and calcium", Brain Res., 1995, 676: 219-224 **(Exhibit 15)**;

16. Pike, J. Christian, et al. "Neurodegeneration Induced by β-Amyloid Peptides in vitro: The Role of Peptide Assembly State", J. Neuroscience., 1993, 13(4): 1676-1687 **(Exhibit 16)**;

17. Prusiner, B. Stanley, et al. "Prion Protein Biology", Cell, 1998, 93: 337-348 **(Exhibit 17)**;

18. Serpell, L.C., et al. "The molecular basis of amyloidosis", Cellular and Molecular Live Sci., 1997, 53: 871-887 **(Exhibit 18)**;

19. Sipe, D. Jean, et al.) "Characterization of the Inbred CE/J Mouse Strain as Amyloid Resistant", Am. J. of Pathology, 1993, 143: 1480-1485 **(Exhibit 19)**;

20. Sipe, D. Jean "Amyloidosis", Ann. Review of Bioche., 1992, 61: 947-975 **(Exhibit 20)**;

21. Smith, M.A. et al. "Heme oxygenase-1 is associated with the neurofibrillary pathology of Alzheimer's Disease", Am. J. Pathol., 1994, 145(1): 42-47 **(Exhibit 21)**;

22. Soto, Claudio and Castano, M. Eduardo "The conformation of Alzheimer's β peptide determines the rate of amyloid formation and its resistance to proteolysis", Biochemical J., 1996, 314: 701-707 **(Exhibit 22)**;

23. Soto, Claudio, et al. "Apolipoprotien E increases the fibrillogenic potential of synthetic peptides derived from Alzheimer's, Gelsolin and AA amyloids", 1995, FEBS Letters, 1995, 371: 110-114 **(Exhibit 23)**;

24. Strauss, Sylvia, et al. "Detection of Interleukin-6 and α_2-Macroglobulin Immunoreactivity in Cortex and Hippocampus of Alzheimer's Disease Patients", J. Acad. of Pathology., 1992, 66(2): 223-230 **(Exhibit 24)**;

25. Yan S-D, Chen X, Chen M, Zhu H, Roher A, Slattery T, Zhao L, Nagashima M, Morser J, Migheli A, Nawroth P, Stern DM, Schmidt "A-M: RAGE and amyloid-beta peptide neurotoxicity in Alzheimer's disease", Nature, 1996, 382: 685-691 **(Exhibit 25)**;

26. Yan, Shi Du, et al. "Amyloid-β peptide-Receptor for Advanced Glycation End product interaction elicits neuronal expression of macrophage-colony stimulating factor: A proinflammatory pathway in Alzheimer disease", Proceedings of the Nat. Acad. Sci., 1997, 94: 5296-5301 **(Exhibit 26)**; and

27. Yankner, A. Bruce "Mechanisms of Neuronal Degeneration in Alzheimer's Disease", Neuron, 1996, 16: 921-932 **(Exhibit 27)**.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone at the number provided below.

Pursuant to 37 C.F.R. §1.97(b)(3), no fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,

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I hereby certify that this paper is being deposited this date with the U.S. Postal Service as first class mail addressed to:
Assistant Commissioner for Patents, Washington, D.C. 20231.

9/20/02
John P. White Date
Reg. No. 28,678

Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 59472-A-PCT-US	Serial No. 10/049,893
	Applicants David Stern, et al.	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Filing Date February 13, 2002	Group Art Unit

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	US	5 8 6 4 0 1 8	4/16/96	Morser et al.			

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	WO	9 7 3 9 1 2 5	10/23/97	Europe				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Akama, T. Keith, et al., "Amyloid β-peptide stimulates nitric oxide production in astrocytes through an NgκB-dependent mechanism," Proc. Natl. Acad. Sci., 1998, 95: 5795-5800 **(Exhibit 3)**;
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		Kilsilevsky, Robert, et al. "Arresting amyloidosis in vivo using small-molecule anionic sulphonates or sulphates: implications for Alzheimer's disease", Nature Medicine, 1995, 1: 143-148 **(Exhibit 9)**;
		Kimball, M.R., et al. "Molecular Conformation of Erabutoxin b; Atomic Coordinates At 2.5 Å Resolution", Biochemical and Biophysical Research Communication, 1979, 88: 950-959 **(Exhibit 10)**;
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		Lander, H. L., et al. "Activation of the Receptor for Advanced Glycation Endproducts triggers a MAP Kinase pathway regulated by oxidant stress", J. Biol. Chem., 1997, 272: 17810-17814 **(Exhibit 13)**;
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		Yankner, A. Bruce "Mechanisms of Neuronal Degeneration in Alzheimer's Disease", Neuron, 1996, 16: 921-932 **(Exhibit 27)**.

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